

REMARKS

Claims 30-65 remain in this application. Claims 1-29 have been cancelled. Claims 30-65 have been added. The Applicants respectfully request reconsideration of this application in view of the above amendments and the following remarks.

Claim Objections

The Examiner has objected to claim 27. Applicants submit that claim 27 has been cancelled. Therefore the objection is believed to be moot.

Claim Rejections - 35 U.S.C. Section 112

The Examiner has rejected claim 6 under 35 U.S.C. Section 112, second paragraph. Applicants submit that claim 6 has been cancelled. Therefore the rejection is believed to be moot.

Claim Rejections - 35 U.S.C. Section 102

The Examiner has rejected claims 1, 7, 8, 25, 28, and 29 under 35 U.S.C. Section 102(b) as being anticipated by U.S. Patent No. 5,802,373 to Yates et al. (hereinafter referred to as Yates). These claims have been cancelled. Applicants respectfully submit that the present claims are not anticipated by Yates.

Claim 30 recites a method comprising “*receiving a binary of a program code, the binary based on a first instruction set architecture; translating the binary to a translated binary, wherein the translated binary is based at least in part on a second instruction set architecture; deviating from precise semantics of the binary during said translating in exchange for advantages offered by the second instruction set architecture; and executing the translated binary*”. As best understood by Applicants, Yates does not teach

or suggest these limitations. Accordingly, claim 30 and its dependent claims are believed to be allowable. Independent claim 43 and its dependent claims are believed to be allowable for similar reasons.

Claim 33 recites a method comprising “receiving a binary of a program code, the binary based on a first instruction set architecture; **checking one or more settable controls that have been set by a programming environment to indicate a compatibility level with which to perform the translation**; translating the binary to a translated binary that is based at least in part on a second instruction set architecture, wherein said translating is **based at least in part on the controls**; and executing the translated binary”. By way of example, and not limitation, examples of controls according to embodiments of the invention are described in paragraphs [0012] and [0029], as well as elsewhere in the specification. As best understood by Applicants, Yates does not teach or suggest these limitations. Accordingly, for at least this reason, claim 33 and its dependent claims are believed to be allowable. Independent claims 49 and 56, and their respective dependent claims, are believed to be allowable for similar reasons.

Claim 62 recites a system comprising “*a dynamic random access memory to store a binary that is based on a first instruction set architecture that **allows binaries to self modify**; a memory controller associated with the dynamic random access memory; a translation logic coupled to the dynamic random access memory to receive the binary, the translation logic is to translate the binary to a translated binary that is based, at least in part, on a second instruction set architecture that **does not allow binaries to self modify**, during the translation the translating logic to instruct the memory controller to perform write operations without checking whether binary is self modifying, thereby increasing speed of execution of the translated binary*”. As best understood by Applicants, Yates does not teach or suggest these limitations. Accordingly, for at least

this reason, claim 62 and its dependent claims are believed to be allowable.

Claim Rejections - 35 U.S.C. Section 103

The Examiner has rejected claims 2-4, 6, 9, 11-24, and 27 under 35 U.S.C. Section 103(a) as being unpatentable over Yates in view of U.S. Patent No. 6,496,922 to Borrill (hereinafter referred to as Borrill).

Applicants do not admit that Yates and Borrill may be combined. Nevertheless, at this time, Applicants respectfully submit that the limitations of the independent claims that are not taught or reasonably suggested in Yates are also not taught or reasonably suggested in Borrill.

As explained with respect to the 102(b) rejection, above, Yates does not disclose the limitations of the independent claims. In the 103(a) rejection, the Examiner stated that: *“Borrill teaches the use of instruction set architecture execution flags (an ISA tag) indicating the native ISA for “visiting code”.*

However, Applicants submit that the ISA tags merely identify the original, native ISA to which an instruction corresponds. See e.g., the Abstract. There is absolutely no teaching or reasonable suggestion in Borrill that the ISA tags be used for deviating from precise semantics of the binary during said translating in exchange for advantages offered by the second instruction set architecture. Furthermore, there is absolutely no teaching or reasonable suggestion in Borrill that the ISA tags be used for indicating a compatibility level with which to perform the translation.

The Examiner is kindly reminded that, in order to support a prima facie obviousness rejection: Prior art reference (or references when combined) must teach or suggest all the claim limitations (MPEP §§ 2142, 2143). Since neither Yates nor Borrill teach or reasonably suggest the limitations of the independent claims, the rejection should

be withdrawn.

Claim Rejections - 35 U.S.C. Section 103

The Examiner has rejected claim 10 under 35 U.S.C. Section 103(a) as being unpatentable over Yates in view of Bich C. Le, “An Out-of-Order Execution Technique for Runtime Binary Translators” 1998 (hereinafter referred to as Le).

Applicants do not admit that Yates and Le may be combined. Nevertheless, at this time, Applicants respectfully submit that the limitations of the independent claims that are not taught or reasonably suggested in Yates are also not taught or reasonably suggested in Le. Accordingly, for at least this reason, the present claims are believed to be allowable.

Conclusion

In view of the foregoing, it is believed that all claims now pending patentably define the subject invention over the prior art of record and are in condition for allowance. Applicants respectfully request that the rejections be withdrawn and the claims be allowed at the earliest possible date.

Request For Telephone Interview

The Examiner is invited to call Brent E. Vecchia at (303) 740-1980 if there remains any issue with allowance of the case.

Request For An Extension Of Time

The Applicants respectfully petition for an extension of time to respond to the outstanding Office Action pursuant to 37 C.F.R. § 1.136(a) should one be necessary. Please charge our Deposit Account No. 02-2666 to cover the necessary fee under 37 C.F.R. § 1.17 for such an extension.

Charge Our Deposit Account

Please charge any shortage to our Deposit Account No. 02-2666.

Respectfully submitted,
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